

To Academician Constantin Corduneanu on the Occasion of his 90th Birthday



Constantin Corduneanu, a member of the Romanian Academy and Emeritus Professor of the University of Texas at Arlington, USA, celebrated his 90th birthday on July 26, 2018.

He was born in Iași, Romania, in 1928. At that time his parents were teachers in the Potangeni village, Movileni commune, of the District of Iași. In 1940 he moved to Iași where he was admitted at the Military High School. In 1945 he was transferred to the Nicolae Filipescu National Military College in Predeal, and graduated in 1947. In the Fall of 1947, he enrolled as a student in the College of Sciences of the University of Iași, and graduated in 1951. Two years later he entered the doctoral program at the same university.

In 1956, he received his Ph. D. in Mathematics with the thesis *Global problems for first and second order nonlinear differential equations* having Professor Ilie Popa as scientific adviser and the famous mathematicians and professors Miron Nicolescu, Grigore C. Moisil, and Adolf Haimovici as scientific reviewers.

The association of Professor Corduneanu with the University A. I. Cuza of Iași had lasted until 1977, period in which he went through all stages of the university hierarchy holding positions of Assistant, Lecturer, Associate Professor, Professor,

Dean of the Faculty of Mathematics (1968-1972), Vice-Rector for Research and Graduate Studies (1972-1973 and 1974-1977).

He also served as assistant or associate professor at the Polytechnic Institute Gh. Asachi of Iași and as the Head of the Department of Mathematics and Physics (1964-1966) and Rector (1966-1968) at the Pedagogical Institute in Suceava.

In 1977, Professor Corduneanu decided to leave Romania and reside in the USA. In January 1978, after teaching a course at the International Centre for Theoretical Physics (ICTP) in Trieste, Italy, he moved from Italy to the USA, teaching the Spring semester of 1978 at the University of Rhode Island, which he had visited before for two academic years and where he was familiar with the place and colleagues. During the next academic year 1978-1979, he was a visiting professor at the University of Tennessee in Knoxville. Meantime, the University of Texas at Arlington created a new professorial position, which Professor Corduneanu occupied by competition, in the Fall of 1979, and from which he retired in 1996 holding the title of Professor Emeritus.

During the 47 years of teaching activity in higher education in Romania and USA, Professor Corduneanu has contributed to the mathematical training of over 4,000 students in Romania and 3,000 students in the US. Over 20 young researchers took their doctorate under the guidance of Prof. Corduneanu.

Besides his usual duties as a Professor, C. Corduneanu had many other activities, such as participating in more than 100 national or international conferences, paying short visits and talking about his research work in over 60 universities or institutes, in all continents with the exception of Australia, and in over 20 countries (including Russia, Ukraine, Germany, England, France, Italy, China, Japan, Hungary, Poland, Portugal, and Chile). During the last 50 years, he has been an associate editor for 10 mathematical journals from Romania, the USA, South Korea, Israel, and Ukraine.

During the last 60 years, he published in Romania and abroad, about 200 research papers, including 7 books in a total of 15 editions (Romanian Academy, Academic Press in NY, Springer Verlag, Cambridge University Press, Taylor and Francis Publishing House in London, John Wiley & Sons in NY, Allyn & Bacon in Boston).

He approached various fields of research: global theory of differential systems, admissibility theory and applications to differential systems, integral or general (causal) Volterra operators, stability theory of systems, especially by the method of comparison, the theory of oscillating movements and waves, in particular, the almost periodic case.

He has organized and participated in several conferences, in Romania and in the USA, including the Centennial Volterra Conference on Integral Equations and Applications, 1996, at the University of Texas at Arlington, attended by specialists

from many countries.

He was a member of several scientific societies from different countries, Doctor Honoris Causa of the universities in Constanta, Brasov, Iași, Suceava, and Ural University in Ekaterinburg (Russian Federation), and received several awards and medals in Romania and abroad: the Romanian Ministry of Education Award (1963), the Gheorghe Lazar Prize of the Romanian Academy (1965), the Distinguished Research Award of the University of Texas at Arlington (1991), the Medal of Merit of the Czech Mathematical Society (2001).

The Romanian Academy elected Professor Corduneanu as a corresponding member in 1974, a nomination that was withdrawn in 1978 as a result of leaving the country. He was reinstated in 1990, and in 2015 he became a full member.

Since 1979 he was active in the Romanian-American Academy of Arts and Sciences (ARA); he was a member of the governing board (1982-1995), President (1995-1998) and President interim (since 2016).

To achieve his dream of printing a mathematical journal in freedom as a venue for finding mathematicians forced to take the path of exile to preserve their human dignity, Professor Corduneanu decided to start publishing the journal *Libertas Mathematica* and presented in 1979 the publication project to the ARA. Although he was not an ARA member, his request was approved by the leadership. Prof. Nicolae Timiraș of Berkeley, CA, was president of the ARA, and Prof. Basil Roman of California State University in Long Beach, vice-president.

The General Assembly of the ARA members and the Annual Congress took place at Monmouth College, West Long Branch, New Jersey, and decided to approve his project to publish the *Libertas Mathematica* journal under the aegis of the ARA. The then ARA secretary, Dr. Stătescu, of Los Angeles, mentioned these decisions in the minutes he drafted after the congress.

The first issue is dated January 1, 1981. From then until 2011, during 31 years, Prof. Corduneanu had the strength and persistence to issue yearly the journal, which definitely has helped mathematicians of the Romanian diaspora to better integrate into the mathematical communities in the USA as well as in Western Europe.

In 2011, he invited me to prepare a new series of the journal and re-launch the *Libertas Mathematica* in the present new international context. We set up an international editorial board, and kept the name “*Libertas Mathematica*” for the journal. First of all, because we want to preserve the community of all mathematicians who during the past 31 years have been interested in the journal, either as contributors of research papers or simply as readers. Secondly, because the old beautiful title alludes to the political freedom, which is always threatened somewhere in the world, and also to the boundless freedom of mathematical thinking.

Thanks to Professor Corduneanu for trusting me and I hope that the evolution

of the *Libertas Mathematica* (new series) in the last seven years has risen to his level of expectations.

This issue of the *Libertas Mathematica* (new series) presents a series of original research papers dedicated to Professor Constantin Corduneanu in celebration of his 90th birthday, and also two invited articles, one concerning the USA experiences of Professor Corduneanu written by a close collaborator of him, Professor Mehran Mahdavi, and another concerning Professor Constantin Corduneanu and the Iași School of Differential Equations.

I consider a debt of honor to dedicate this issue of the *Libertas Mathematica* (new series) to Professor Corduneanu in celebration of his 90th birthday as a recognition of his outstanding contributions to mathematical research and a homage to the Romanian school of mathematics.

Vasile Staicu - Editor-in-Chief